

THAT WHICH IS CLAIMED:

1. An apparatus comprising:
a process chamber for receiving at least one wafer; and
a gettering filter in fluid communication with said process chamber for removing oxygen from a gas that is passed through said gettering filter en route to entering said process chamber, said gettering filter comprising:
a vessel defining an inlet and an outlet through which the gas enters and exits, respectively; and
a plurality of pieces of an oxidizable material disposed within said vessel, wherein the oxidizable material is selected so as to oxidize upon exposure to oxygen in the gas such that the gas exiting said vessel through the outlet has less oxygen than the gas entering said vessel through the inlet.
2. An apparatus according to Claim 1 wherein the oxidizable material is selected such that a resulting oxide layer is etchable upon exposure to an etchant.
3. An apparatus according to Claim 1 wherein the oxidizable material is formed of the same material as the at least one wafer.
4. An apparatus according to Claim 1 wherein the oxidizable material comprises silicon.
5. An apparatus according to Claim 1 wherein said plurality of pieces of the oxidizable material have different sizes.
6. An apparatus according to Claim 1 wherein said gettering filter further comprises a heater in thermal communication with said vessel to heat said plurality of pieces of the oxidizable material.

7. An apparatus according to Claim 6 wherein said heater is proximate to and at least partially surrounds said vessel.

8. An apparatus according to Claim 6 wherein said heater maintains said plurality of pieces of the oxidizable material at a temperature between about 600°C and about 1200°C.

9. An apparatus according to Claim 1 wherein said vessel is formed of a material that is non-reactive with the gas.

10. An apparatus according to Claim 9 wherein said vessel is formed of quartz.

11. An apparatus according to Claim 1 wherein said process chamber comprises a furnace.

12. A gettering filter comprising:
a vessel defining an inlet and an outlet through which gas enters and exits, respectively;

a plurality of pieces of an oxidizable material disposed within said vessel, wherein the oxidizable material is selected so as to oxidize upon exposure to oxygen in the gas such that the gas exiting said vessel through the outlet has less oxygen than the gas entering said vessel through the inlet; and

a heater in thermal communication with said vessel to heat said plurality of pieces of the oxidizable material.

13. A gettering filter according to Claim 12 wherein the oxidizable material is selected such that a resulting oxide layer is etchable upon exposure to an etchant.

14. A gettering filter according to Claim 12 wherein the oxidizable material comprises silicon.

15. A gettering filter according to Claim 12 wherein said plurality of pieces of the oxidizable material have different sizes.

16. A gettering filter according to Claim 12 wherein said heater is proximate to and at least partially surrounds said vessel.

17. A gettering filter according to Claim 12 wherein said heater maintains said plurality of pieces of the oxidizable material at a temperature between about 600°C and about 1200°C.

18. A gettering filter according to Claim 12 wherein said vessel is formed of a material that is non-reactive with the gas.

19. A gettering filter according to Claim 18 wherein said vessel is formed of quartz.

20. A method comprising:
 flowing gas through a vessel containing a plurality of pieces of an oxidizable material;
 forming an oxide layer on at least some of the pieces of oxidizable material as a result of exposure of the pieces of oxidizable material to oxygen in the gas and as the gas flows through the vessel; and
 introducing the gas into a process chamber containing at least one wafer once the gas has flowed through the vessel and over at least some of the pieces of oxidizable material such that the gas introduced to the process chamber has less oxygen than the gas entering the vessel.

21. A method according to Claim 20 further comprising heating the plurality of pieces of the oxidizable material while flowing gas through the vessel.
22. A method according to Claim 21 wherein heating the plurality of pieces of the oxidizable material to a temperature between about 600°C and about 1200°C.
23. A method according to Claim 20 further comprising:
halting the flow of gas through the vessel;
etching the plurality of pieces of the oxidizable material to at least partially remove the oxide layer while the flow of gas through the vessel is halted; and
recommencing the flow of gas through the vessel once the plurality of pieces of the oxidizable material have been etched.
24. A method according to Claim 23 wherein etching the plurality of pieces of the oxidizable material comprises exposing the plurality of pieces of the oxidizable material to an etchant.
25. A method according to Claim 24 wherein the plurality of pieces of the oxidizable material comprises a plurality of pieces of silicon, and wherein exposing the plurality of pieces of the oxidizable material to an etchant comprises exposing the plurality of pieces of silicon to hydrofluoric acid.